S/N 10/785.227

Docket: YOR920040028US1 (YOR.511)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of: Samuel S. Adams et al.

Serial No.: 10/785,227 Group Art Unit: 2443

Filed: February 25, 2004 Examiner: K. G. Belani

For: METHOD AND STRUCTURE FOR AUTOMATED LAYOUT

DIRECTOR

Commissioner of Patents Alexandria, VA 22313-1450

## APPELLANTS' REPLY BRIEF ON APPEAL

Sir:

In reply to the new arguments raised by the Examiner in the Examiner's Answer mailed on April 16, 2009, Appellants respectfully provide the following reply.

In general, Appellants submit that the Examiner's Answer demonstrates that the Examiner's position is deficient by its failure to evaluate the claimed invention from the perspective of one having ordinary skill in the art.

More specifically, by taking words out-of-context, the Examiner's evaluation fails to honor the plain meaning of the claim language, as would be acceptable to one having ordinary skill in the art and still be consistent with the description in the specification, as required in MPEP §82111-2111.01, and fails to evaluate the claimed invention "as a whole", as required in MPEP §2141.02.

Moreover, in order to satisfy the plain meaning of the claim language consistent with the description in the specification, the principle of operation of the mechanisms in the cited references would inherently have to change, a requirement precluded by the

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holding in In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959), as described in MPEP §2143.01: "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious."

Finally, Appellants believe that attempting to reconstruct the claimed invention by taking words out-of-context inherently fails the requirement of the holding in KSR that there be an expectation of success in the urged modification or that the urged modification can only be described as improper hindsight, since there would be no objective evidence of any reasonable rationale for modification except from the Appellants' own disclosure.

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GROUND 1: The 35 USC §101 rejection for claim 15

On page 24 of the Examiner's Answer, the Examiner provides clarification for this rejection by pointing to paragraph [0138] of the specification, alleging that Appellants "The appellant's specification paragraph 0138 includes the following text: "or other suitable signal-bearing media including transmission media such as digital and analog and communication links and wireless.", when describing storing instructions on a variety of machine-readable data storage media. The appellants thereby have themselves associated "signals" with transmission media."

Thus, the Examiner seemingly concedes that the sentence of paragraph [0138] is clearly directed towards <u>storage of instructions</u>, as Appellants have been pointing out all along. Nevertheless, the Examiner maintains that the words "signal-bearing media" and "transmission media" are non-statutory.

That is, in the next paragraph, the Examiner then explains: "While in transit, instructions are stored over the carrier wave transmission medium, similar to television program signal broadcasts, or optical networks using light waves as a carrier transmission medium. The carrier wave form, whether electromagnetic or optical, is a form of radiation energy, as any basic textbook physics will describe. Therefore, the appellants' argument that "there is simply no currently known method that a transmission medium could even possibly be used for storage of instructions", is simply not true. Furthermore, the examiner has successfully resolved similar 101 rejection for another applicants, including several IBM cases, by slightly modifying the claimed text to exclude non-allowable transmission media"

In response, Appellants first note that, relative to the final sentence recited above, in the Office Actions of record, the Examiner has made no attempt to make of record the Examiner's personal preference for wording of a storage media claim. The only attempt has been the Examiner's allegation that the specification would have to be changed.

Second, and much more significant, the above explanation by the Examiner perfectly demonstrates the improper evaluations that inherently results when words are taken out-of-context.

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The Examiner's explanation, in view of the slew of similar recent rejections by the USPTO following the decision in *Nuijten*, suggests that the USPTO has interpreted "transmission media" as equivalent to "signal". Presumably, someone at the USPTO considers that the phrase "transmission media" means "the <u>mechanism by which</u> a transmission occurs", thereby presumably allowing evaluation that a paragraph in a specification that is clearly directed toward storage of computer instructions can thereby be interpreted to imply that Appellants allege that storage of computer instructions occurs during transmission of these computer instructions.

Both the Examiner and the USPTO are wrong. Neither the USPTO nor this Examiner provides any objective support for this interpretation of "transmission media."

Appellants respectfully submit that, to one having ordinary skill in the art, the phrase "transmission medium" does <u>not</u> mean "the <u>mechanism by which</u> transmission occurs", thereby implying some type of association and/or equivalence to a "signal, *per se*", as would presumably be the mechanism by which a typical transmission occurs.

Rather, this phrase <u>actually</u> means "the medium <u>through which</u> a transmission occurs", as can be clearly confirmed by checking on Wikipedia.org description of this phrase:

"A transmission medium (plural transmission media) is a material substance (solid, liquid or gas) which can propagate energy waves. For example, the transmission medium for sound received by the ears is usually air, but solids and liquids may also act as transmission media for sound.

The absence of a material medium (the vacuum of empty space) can also be thought of as a transmission medium for electromagnetic waves such as light and radio waves. While material substance is not required for electromagnetic waves to propagate, such waves are usually affected by the transmission media through which they pass, for instance by absorption or by reflection or refraction at the interfaces between media.

The term transmission medium can also refer to the technical device which employs the material substance to transmit or guide the waves. Thus an optical fiber or a copper cable can be referred to as a transmission medium."

The description in the specification upon which the Examiner relies upon is clearly using the final usage described above, by its implied reference to an <u>apparatus used in transmitting</u>, for example, signals representing computer instructions, and the capability of this transmitting device to store the instructions being transmitted.

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Moreover, the descriptive "signal-bearing" in the claim language has nothing whatsoever to so with converting the claim as being directed to a signal, per se, as was express subject of the claim rejected in Nuijten. Indeed, this descriptive merely is intended to indicate that there is functionality between the instruction and the underlying storage medium, in order to clearly distinguish from a storage medium consisting of a piece of paper upon whose surface is printed computer instructions. A printed instruction has no functionality with its underlying piece of paper and, therefore, the paper is not a signal-bearing medium", as required in the rejected claim or in paragraph [0138].

In contrasting the facts underlying the holding in *Nuijien* from the facts of the present application, it is first noted that rejected claim 15 of the present application does <u>not</u> start out with the preamble "A signal...", as was true in the rejected claims of *Nuijien*. A key aspect for the Court to uphold the rejection of these claims directed to a signal, per se, is that a signal is too transitory.

A second difference is that, unlike the "signal" claims in *Nuijten*, rejected claim 15 does recite acts of a process, by which acts the claim defines the set of instructions.

A third difference is that, unlike the transient electric or electromagnetic transmission being expressly claimed in the rejected *Nuijten* claims, rejected claim 15 <u>does</u> recite a manufacture as being a tangible article when properly viewed from the perspective of ordinary skill in the art, from which perspective Appellants submit the claims must be viewed.

Relative to the Examiner's characterization that one having ordinary skill in the art considers that a set of instructions is "stored" during a transmission of the instructions, Appellants note that the Examiner provides no objective evidence, relying instead only on the Examiner's own conclusory statements. These statements are clearly false. Indeed, Appellants respectfully note that the Examiner's characterization improperly confuses the two verbs "store" and "transmit."

These two words are <u>not</u> equivalent, and, based upon the Court's rationale in Nuijten, are more appropriately considered as antithetical to each other, since a transmission was considered by this Nuijten Court as <u>too transitory</u> to be considered as statutory subject matter. Storage, in contrast, requires <u>permanence</u>, as can be demonstrated Docket YOR920040028US1 (YOR.511)

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by the two definitions for "store" and "transmit" from Webster's Universal College Dictionary 1997 Edition:

Store: ... 9. To deposit in a storehouse or other place for keeping. 10. To put or retain (data) in a computer memory unit.

Transmit: 1. To send or forward, as to a recipient or destination; dispatch; convey... 5.a. To cause (light, heat, etc.) to pass through a medium.... 6. Radio and Television. To emit (electromagnetic waves). 7. To send a signal by radio waves or by wire.

Appellants submit that, based on the above-recited definitions, one having ordinary skill in the art would clearly <u>not</u> normally refer to or consider that a transmission of a set of computer instructions is a form of storage, simply because the electromagnetic waves used in a transmission do not have the characteristic of either "depositing" or "retaining" these instructions, as would be required by to execute the process of "storing".

Therefore, the only basis for the rejection of this claim is the imagined connection between the phrase "signal-bearing" and "transmission medium", as perceived by someone at the USPTO, and this perception arises <u>only</u> by taking words selectively out-of-context and contradictory to normal usage by one having ordinary skill in the art. Thus, the USPTO has clearly overreacted on the *Nuijten* holding.

Appellants again point out that this rejection is improperly based upon an improper interpretation by the USPTO that has never been supported by objective evidence by any Examiner using this rationale. Indeed, the above-recited definition from Wikipedia clearly supports Appellants' position that this claim 15 is clearly directed to any memory medium capable of having functionality between the instruction and the underlying medium. Many examples of hardware were described in the specification that were indeed capable of this functionality, including the standalone diskette exemplarily shown in Figure 13.

In order to maintain this rejection, the Examiner would have to provide objective evidence that "transmission media" is understood in the art as being equivalent to "signal", and such objective evidence by either this Examiner or the USPTO is not on the record. Therefore, this claim is clearly not been demonstrated to be directed toward non-statutory subject matter, and the Board is respectfully requested to reverse this rejection or, in the Docket YOR920040028USI (YOR.511)

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alternative, to provide of record some objective evidence supporting the position of the USPTO based on taking wording out-of-context and to provide wording considered acceptable upon remand.

GROUND 2: The Anticipation Rejection for Claim 14, based on Kamata

Beginning at the bottom of page 25, the Examiner explains the rationale for the anticipation rejection of record for claim 14, based on Kamata. As expressed in the following three sentences on page 26, the Examiner's position is essentially based on ignoring the plain meaning of "user specified rules":

"Instead of naming them "user specified rules", Kamata has used the word "instructions" for the user input to combine images in an arrangement that the user desires. Whether or not the Kamata reference uses the phrase "instruction" in place of "user specified rules" is not significant. The same end result can be achieved by using phrases like "settings", "configuration", "options", "selections" or "preferences", etc."

In response, Appellants respectfully submit that none of the alternative terms suggested above convey the meaning of "user-specified rules" that control the size and/or layout of subpanes of the composite image of an online meeting. As clearly described in lines 19-50 of column 6 of Kamata, the mechanism in this reference is merely a control signal indicating a user's selection of the images available. Once this selection is made, the composite image generated for that user is strictly controlled in a predetermined manner.

In contrast to Kamata's simple selection/switching mechanism, as explained even on page 2 of the specification of the present application, the user-specified rules of the claimed invention provide a different control mechanism that permits each user to arbitrarily control size and/or layout, a feature and capability not present in the simple selection/ switching mechanism of Kamata. Appellants respectfully submit that these two control mechanisms are clearly different, as described in the plain meaning of the descriptive "user-specified rules."

That is, the simple selection/switching mechanism of Kamata would most likely consist of a control instruction based on a control word consisting of 1's and 0's that Docket YOR920040028US1 (YOR.511)

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together represent which of the possible N images should be sent to the user, or some type of coding representing this selection information, or a simple listing of selected images. This single word is not equivalent to a set of "user-specified rules." The composite image generator would then generate the composite image based on relative sizes necessary to accommodate the user's selection.

In contrast, as clearly demonstrated throughout the specification, the claimed invention describes a control mechanism based on sending back to the controller a set of user <u>rules</u> directed to selection, size, and layout of the subpanes of the composite image. The mechanism in Kamata does <u>not</u> involve <u>rules</u> as a control mechanism, and none of the Examiner's proffered alternative word choices conveys this concept of using "user-specified <u>rules</u>" as the control mechanism to determine the content and layout of the composite on-line meeting, to be seen by that user. A simple selection instruction is not equivalent to a "rule", let alone <u>rules directed to size and/or layout of subpanes</u> of a composite on-line meeting.

The Examiner is improperly attempting to base this rejection on a premise than any similarity in result between two different mechanisms presumes equivalence.

It is again noted that the specification of the present application specifically discusses Kamata, clearly explaining the distinction between these two mechanisms. Therefore, the Examiner's contention that considering the simple selection/switching control signal used in Kamata as being consistent with the specification is clearly a logical fallacy, since the specification specifically identifies this reference as being distinctly different. It would, therefore, be an error in logic to maintain that the Examiner's interpretation is consistent with the specification when the specification specifically addresses the mechanism of the rejection and describes the differences.

Therefore, relative to the Examiner's argument that "... the examiner can only give consideration to what is disclosed in the claim, not in the specification", Appellants again point out that the claim interpretation of claim terminology is required to honor the plain meaning of the language, as consistent with the specification and as agreeable to one having ordinary skill in the art. Appellants submit that one having ordinary skill in the art would not equate the "user-specified rules" of claim 14 to the simple selection/switching Docket YOR920040028US1 (YOR.511)

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instruction of Kamata, since the word "rules" conveys a meaning beyond a simple selection/switching instruction, particularly when the specification explains the deficiencies of the mechanism in Kamata relative to its own capabilities.

That is, although Kamata provides a capability for each terminal to control its display contents, there is no suggestion in Kamata to use the method of the present invention of having "user-specified rules", as that term is described in the present application at, for example, line 18 of page 13 through line 10 of page 15.

Thus, as explained at lines 21-22 of page 13, each layout rule might be of the form "(Condition) (Layout Specification)", so that the user's layout rules comprise a Boolean combination of conditions, as described in dependent claim 2. There is no suggestion that the user's selection in Kamata uses such a format or method based on user <u>rules</u>, as this word is commonly understood.

Therefore, the Board is respectfully requested to reverse this rejection of claim 14 as being anticipated by Kamata.

GROUND 3: The Obviousness Rejection for Claim 1 and 15, based on van Dok et al, further in view of Digate et al;

On page 27 of the Examiner's Answer, the Examiner argues that the rejection of claims 1 and 15 is justified because the "composite images" of van Dok: "... not only display text messages in an online instant messaging meeting, but also show tables, file icons and emoticon images."

In response, Appellants respectfully submit that one having ordinary skill in the art would not consider the above explanation as satisfying the plain meaning of the claim language, particularly as required to also be consistent with the specification.

The most that can reasonably be said about van Dok is that it is directed to the entirely different problem of displaying images of <u>characters</u> of an online messaging meeting. The mechanism underlying the transmission of symbols representing characters of text of instant messages is entirely different from that used to transmit video images of an online meeting. The composite images presented to the participant nodes in the claimed Docket YOR920040028US1 (YOR.511)

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invention are <u>received</u> by that node as having been calculated in accordance with a layout rule for that user node.

Van Dok is not directed to receiving a composite image of an on-line meeting.

Rather, the receiver of van Dok merely receives transmissions of symbols representing text characters of the messaging session with one or more other participants. The user himself then makes any changes to his own display, such as having his display change fonts to demonstrate different participants' text inputs or adding any additional information such as emoticon images.

Even if text characters were to be considered as images and these text characters were then considered to be a "composite image" of the on-line messaging session, the user does not <u>receive</u> this composite image in its entirety. Rather, the user receives only the portion from other participants. The user's own portion of the "composite image" is not received, as required by the plain meaning of the claim language.

Moreover, the content changes, upon which the Examiner relies in the rejection, are made at the receiving apparatus itself. Therefore, these content changes of a single display pane are not at all equivalent to layout rules for subpanes of a composite image of an online meeting. The online composite image of the claimed invention involves a data feed of video signals, as would be well understood by one having ordinary skill in the art and as clearly required in the claim language.

Thus, again, in the rejection of record, the Examiner improperly attempts to take words out-of-context from van Dok and ignores the remaining description in this reference that clearly distinguish from the claimed invention. The instant messaging mechanism of van Dok is not based on a video signal requiring a data feed and does not generate a composite signal of the online session that is received by each participant's receiver and that is based upon layout rules. Moreover, any customization in van Dok's receiver is made at the receiver itself, not at a remote composite image generator that calculates the composite image to be respectively transmitted to each participant's receiver, each receiver's composite image being generated based upon user-specified rules sent by that user to the composite image generator.

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Relative to the Examiner's contention that "If the claims were appropriately amended to include the limitations that are being pointed out in this appeal, the basis for rejection or allowance would have been different", Appellants respectfully submit that, from the perspective of one having ordinary skill in the art, particularly with the clarification above, no claim changes are necessary to distinguish from van Dok.

It is futher noted that, relative to the above-recited statement, the Examiner has made no suggestions during prosecution that Appellants could have evaluated that would incorporate the Examiner's personal preferences for claim wording.

Therefore, even if secondary reference Digate were to be incorporated into primary reference van Dok, the combination would not provide all the elements of these claims, and the Board is respectfully requested to reverse this rejection for claims 1 and 15.

GROUND 4: The Obviousness Rejection for Claim 2, based on van Dok/Digate;

Appellants have only one more point to make relative to the rejection of claim 2, as described on page 7 of the Examiner's Answer, since the Examiner's response to Ground 4 beginning on page 28, does nothing to advance the Examiner's position, in view of Appellants' arguments in their Appeal Brief, since the description in the last line of paragraph [0063] does <u>not</u> relate to using Boolean operators, let alone in the manner described by claimed invention.

However, it is first noted that the rejection of claim 2, as detailed on page 7 of the Examiner's Answer describes Digate: "In the same field of endeavor, Digate ... includes configuration data (interpreted to correspond to layout rules reflecting user preferences and group definitions) related to the <u>delivery of messages</u> to the participants..."

Appellants again respectfully submit that the rules determining the <u>delivery of</u>
<u>message</u> to participants is distinctly different from the <u>layout rules</u> of the claimed
invention. The rejection simply ignores that rules for <u>delivery</u> are <u>not</u> equivalent to rules
for <u>layout</u> of subpanes of a composite image.

Therefore, even if primary reference van Dok and secondary reference Digate were to be combined, there would still be no teaching or suggestion of the element defined in Docket YOR920040028US1 (YOR.511)

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claim 2, and the Board is respectfully requested to reverse this rejection for this reason alone.

Moreover, it is respectfully submitted that the rejection of record for claim 2, as detailed on page 7 of the Examiner's Answer, provides no reasonable rationale to modify primary reference van Dok, since the "layout" of each participant's display in van Dok, if there is considered to be layout preferences and settings, is <u>already under the user's personal control</u>. There is no articulation or explanation of how the table in secondary reference Digate would in any way improve each participant's personal preferences for display context on his receiver.

Indeed, the table in Digate, as described <u>by the Examiner</u> in the rejection, is directed to the <u>delivery of messages</u>, an entirely different concept from that of controlling a layout or content of the display of text. Again, the Examiner attempts to take words out-of-context, resulting in a deficient rejection.

Therefore, the rejection for claim 2 is also deficient for failure to provide a reasonable rationale to modify primary reference van Dok that is based on any objective evidence except the roadmap provided by the claimed invention.

GROUND 5: The Obviousness Rejection for Claims 3-7, 9, and 10, based on van Dok/Digate, further yet in view of Kamata;

Appellants respectfully submit that the Examiner's comments in paragraph e. beginning on page 29 of the Examiner's Answer do not further advance the Examiner's position and have no further comments.

GROUND 6: The Obviousness Rejection for Claim 10, based on van Dok/Digate, further yet in view of Kamata

Appellants' only additional comment relative to the Examiner's comments in paragraph e. on page 29 relative to Ground 6 is that tertiary reference Kamata is directed to video, not instant messaging. The two technologies are completely different. Thus, there Docket YOR920040028US1 (YOR.511)

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would be no reasonable rationale to modify the primary reference, let alone an expectation of success, absent improper hindsight.

GROUND 7: The Obviousness Rejection for Claims 8 and 11, based van Dok/Digate, further yet in view of Moran et al

The only additional comment Appellants submit, based on the Examiner's response in paragraph h. at the top of page 31 of the Examiner's Answer, is that the Examiner's evaluation is whether the element alleged to be missing would itself be obvious, thereby contradicting the requirement that the claimed invention be evaluated "as a whole", as clearly required in MPEP 2141.01: "In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." Stratoflex, Inc. v. Aeroquip Corp., 713 f.2D 1530, 281 USPQ 871 (Fed. Cir. 1983).

Moran clearly involves a different problem and a different technology from the primary reference van Dok.

GROUND 8: The Obviousness Rejection for Claims 12 and 13, based on Kamata/Digate.

Appellants respectfully submit that the Examiner's comments in paragraph g. on page 31 do not further advance the Examiner's position for this rejection, particularly given the technical fact that two entirely different technologies are involved, that there is no reasonable rationale to modify primary reference Kamata, and that neither Kamata nor Digate suggest using a layout rule for subpanes of a composite online meeting. The simple selection by each user in Kamata does not constitute a layout rule.

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## CONCLUSION

In view of the foregoing, Appellants submit that claims 1-14 are clearly enabled and patentably distinct from the prior art of record and in condition for allowance and that claim 15, if considered by the Board as possibly directed to a transmission in spite of Appellants' explanation above, can be easily placed into condition for allowance upon remand by wording changes indicating a storage medium.

Thus, the Board is respectfully requested to reverse the rejection of claims 1-14 and to either provide reasonable objective evidence that "transmission media" is equivalent to a "signal", thereby remanding to the Examiner with specific instructions for placing claim 15 into condition for allowance by indicating the choice of wording deemed by this panel as appropriate, or likewise reverse the rejection for claim 15 as improperly based upon an incorrect presumption that "transmission media" is equivalent to "signal."

Please charge any deficiencies and/or credit any overpayments necessary to enter this paper to Assignee's Deposit Account number 50-0510.

Respectfully submitted,

Dated: June 16, 2009

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